

ABSTRACT

The present invention relates to IR-sensitive compositions suitable for the manufacture of printing plates developable on-press. The IR-sensitive compositions comprise a first polymeric binder which does not comprise acidic groups having a pKa value ≤ 8 ; a second polymeric binder comprising polyether groups; an initiator system; and a free radical polymerizable system comprising at least one member selected from unsaturated free radical polymerizable monomers, free radical polymerizable oligomers and polymers containing C=C bonds in the back bone and/or in the side chain groups. The initiator system includes (i) at least one compound capable of absorbing IR radiation; (ii) at least one compound capable of producing radicals selected from polyhaloalkyl-substituted compounds; and (iii) at least one polycarboxylic acid of formula $R^4-(CR^5R^6)_r-Y-CH_2COOH$, wherein $ox_i < red_{ij} + 1.6$ eV, where ox_i = oxidation potential of component (i) in eV, and red_{ij} = reduction potential of component (ii) in eV.